

CABIN AIR QUALITY SYSTEM

ABSTRACT OF THE DISCLOSURE

5 An air quality system comprising at least one air cleaner unit in
communication with an interior air space. In one embodiment, an air quality
system for an aircraft comprises a first set of air cleaner units in communication
with a lower plenum of the aircraft recirculation system and a second set of air
cleaner units in communication with an upper plenum of the aircraft recirculation
10 system. Each air cleaner unit comprises at least one adsorbent unit in
combination with at least one photocatalytic oxidation unit. In one embodiment,
an air cleaner unit comprises a relatively weak adsorbent material upstream
from a photocatalytic oxidation unit, and a relatively strong adsorbent material
downstream from the photocatalytic oxidation unit. Methods for removing a
15 pollutant from an air stream and for making an air cleaner unit are also
disclosed.